

# **CSSS/POLS 510 - Maximum Likelihood Estimation**

## **Lab 6. In- and Out-Sample Goodness of Fit, and Cross-Validation for Binary Models**

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# Housekeeping

- Homework 2 grades will be posted during the weekend
- Homework 3 is due November 7 (Fri) 3:30pm
- Agenda
  - Homework 2 review
  - Visualization of logit model review
  - Goodness of fit

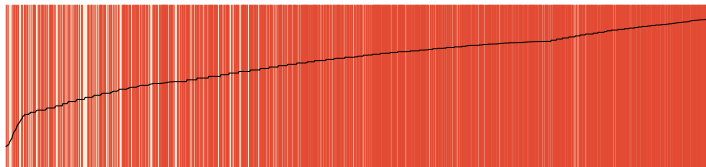
# Goodness of Fit: Overview

- 1 Likelihood Ratio Test
- 2 Akaike Information Criterion
- 3 Bayesian Information Criterion
- 4 Percent Correctly Predicted
- 5 Separation Plots
- 6 Actual vs. Predicted Plots
- 7 Error vs. Predicted Plots
- 8 ROC Plots

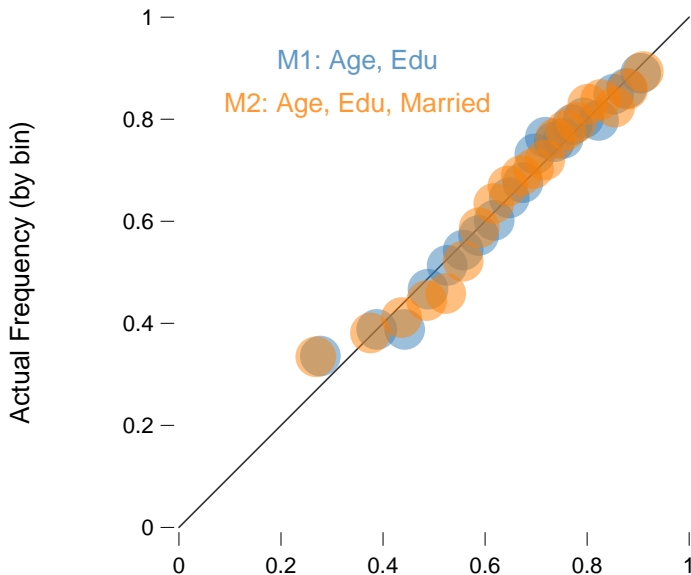
# simcf and tile

- Most of the GoF above mentioned will be computed using source code programmed by Chris.
  - You will find those in his website and in the source folder from the compressed materials.
- It is assumed that you have installed both `simcf` and `tile`.

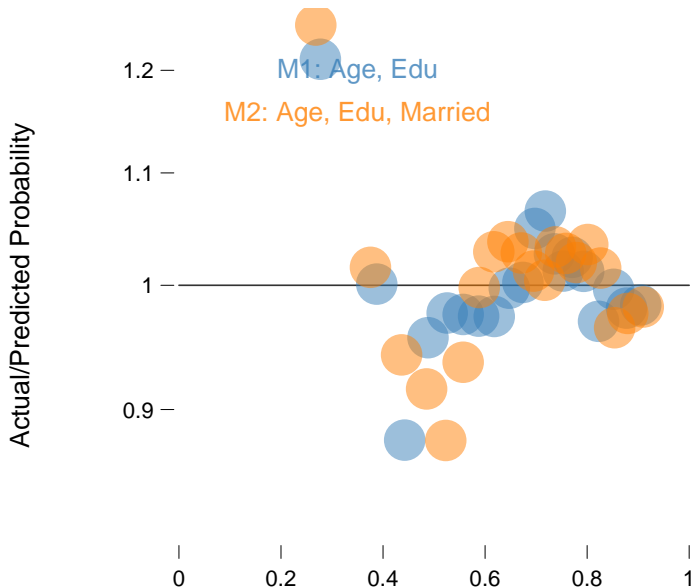
# Preview: Separation Plots



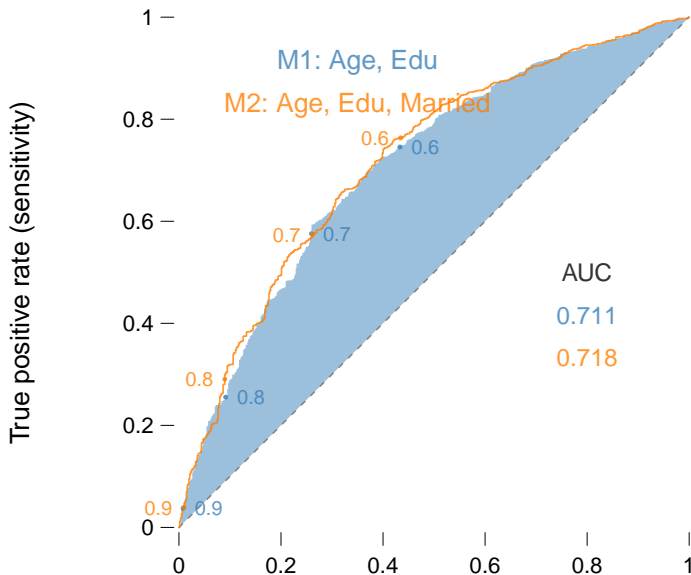
# Preview: Actual vs. Predicted Plots



# Preview: Error vs. Predicted Plots



# Preview: ROC Plots





FIN